EXHIBIT A

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TENNESSEE CHATTANOOGA DIVISION

ECOLAB INC., and NALCO COMPANY, LLC d/b/a Nalco Water, an Ecolab Company and/or Nalco Water,

Plaintiffs,

v.

ANTHONY RIDLEY and CHEMTREAT, INC.,

Defendants.

No. 1:22-cv-00050-TRM-SKL

Hon. Travis McDonough

Magistrate Judge Susan K. Lee

EXPERT REPORT OF LAURENCE D. LIEB

Introduction

- 1. My name is Laurence D. Lieb. I am the President of Tyger Forensics Inc., which provides, among other things, computer forensics and electronic discovery services to litigation attorneys and their clients. I am a Magnet Forensics Certified Examiner and a Cellebrite Certified BlackLight Examiner. I am also a licensed private investigator in the State of Michigan.
- 2. To obtain my certification as a Magnet Forensics Certified Examiner, I undertook online training led by Magnet Forensics. To remain certified, I am required, from time to time, to retrain and pass certification examinations for new software versions. A true and exact copy of my certification is attached as part of **Exhibit A** and incorporated by reference.
- 3. To obtain my certification as a Cellebrite Certified BlackLight Examiner, I undertook online training led by Cellebrite. To remain certified, I am required, from time to time, to retrain and pass certification examinations for new software versions. A true and exact copy of my certification is attached as part of **Exhibit B** and incorporated by reference.
- 4. I counsel and assist clients in the preservation, extraction, and analysis of electronic data, using industry-standard practices, based on evidence personally analyzed, and form expert opinions regarding human interaction with electronic data from smartphones, computers, cloud-based sources, and a myriad of other electronic devices. I have been retained for this type of work around the country by numerous clients, as described in my curriculum vitae, which is attached as **Exhibit C**.
- 5. I have been retained by Ecolab, and its counsel, Fisher & Phillips LLP, to provide expert opinions regarding my forensic analysis of a data loss prevention system report and documents in the litigation titled ECOLAB Inc., and NALCO COMPANY, LLC d/b/a Nalco Water, an Ecolab Company and/or Nalco Water, Plaintiffs, v. ANTHONY RIDLEY, and

CHEMTREAT, INC, pending in the United States District Court, Eastern District of Tennessee, Chattanooga Division (the "Litigation").

- 6. My hourly rate for this matter varies by task as follows: for pure forensic analysis & reporting, \$350 per hour; for written declarations, depositions, and other sworn testimony, \$450 per hour. My fees are unrelated to the outcome of the Litigation. My curriculum vitae, attached as **Exhibit C**, lists my testimonial experience for the last four years and all my publications for the last ten years.
- 7. This report is based on my personal knowledge, experience, and expertise in the area of forensic analysis of electronic devices. It is also based on my review of the documents and information contained within Ecolab former employee, Anthony Ridley's OneDrive account and Ecolab's digital loss prevention tool, Digital Guardian's report which captured Anthony Ridley's human interaction with Ecolab's files, and ChemTreat's CrowdStrike report.
- 8. It is my understanding that the plaintiffs in this case are Ecolab, Inc. and Nalco Company, LLC ("Plaintiffs" or "Ecolab"), and the defendants are ChemTreat, Inc. ("ChemTreat") and a former employee of Plaintiff named Anthony Ridley ("Ridley"). The claims pleaded by the Plaintiff, include (1) theft of trade secrets in violation of the Defend Trade Secrets Act, (2) violation of the Tennessee Uniform Trade Secrets Act, (3) breach of contract, (4) breach of fiduciary duty of loyalty, (5) tortious interference with contractual relationships, (6) procurement of breach of contract, (7) unfair competition, and (8) civil conspiracy. Plaintiffs claim that Ridley misappropriated trade secrets and other confidential information from Ecolab.
- 9. I understand that discovery is ongoing in this Litigation. I reserve the right to render additional opinions, to supplement or amend the opinions in this report, and to provide additional grounds for those opinions based on my ongoing analysis of the materials provided to me or as may

be required by events that occur during the course of this Litigation, including but not limited to responding to or analyzing positions taken by Ridley or his experts.

Forensic Preservation

- 10. I used AccessData FTK Imager version 4.5.0.3 to create a bit for bit forensic image of Ridley's Ecolab Microsoft OneDrive account ("OneDrive Account").
- 11. It is critical to use "Best Practices" when conducting a forensic examination. "Best Practices" are defined as use of industry-standard chain of custody forensic software that will preserve and maintain which specific person has sole control over a specific single source of electronic evidence up to a time and date certain. It also includes the use of tools and methodologies that do not make changes to the underlying electronic evidence in any way. If the proper standardized software is not used, it can result in the underlying data being changed or otherwise distorted. The software, tools, and methodologies that I used to conduct my forensic examination comport with these "Best Practices."

Digital Guardian Report

12. Ecolab employs a data loss prevention tool, Digital Guardian, to journal Ecolab employees' interactions with Ecolab files, specifically to capture and memorialize unauthorized exfiltration of files, such as the downloading and copying of Ecolab files to external USB media, uploading of Ecolab files to non-Ecolab cloud storage services, and the emailing of Ecolab files to 3rd party email accounts. Digital Guardian is designed specifically to record the exfiltration of trade secrets, intellectual property and company files by employees. Furthermore, the Digital Guardian Report contains all the categories of information I seek to analyze and report on in theft of trade secrets matters. The fact that I was not able to forensically analyze Ridley's former Ecolab work computers has literally no effect on my strongly held opinion that Ridley exfiltrated thousands of Ecolab files.

- 13. Ecolab's data loss prevention tool, Digital Guardian version 8.4.0.0263, generated a report ("Digital Guardian Report") of all interactions former employee Ridley performed regarding Ecolab files during the period May 22, 2021 through July 1, 2021 inclusive. I forensically analyzed the Digital Guardian Report and came to the forensic observations and opinions set forth in this report.
- 14. The Digital Guardian Report captured and recorded an extensive amount of files being exfiltrated by Ridley using his former Ecolab laptop. From a forensic analysis standpoint, the Digital Guardian Report provides more than sufficient amount of information for me to arrive at my conclusion that Ridley misappropriated thousands of Ecolab files.

Forensic Analysis - Uploading Files to a Personal Microsoft Account

- 15. Forensic analysis revealed Ridley uploading a file named "fb na sales 2021 exprice review for customers.pptx" to a personally owned Microsoft account on 5/22/2021 10:05 PM EST from Ridley's Ecolab workstation, an HP 1030 G2.
- 16. Forensic analysis revealed Ridley uploading a file named "2021 partnership and market overview.pptx" to a personally owned Microsoft account on 5/22/2021 10:20 PM EST from Ridley's Ecolab workstation, an HP 1030 G2.
- 17. Forensic analysis revealed Ridley uploading a file named "2021 partnership and market overview simmons foods.pptx" to a personally owned Microsoft account on 5/22/2021 10:32 PM EST from Ridley's Ecolab workstation, an HP 1030 G2.
- 18. Forensic analysis revealed Ridley uploading a file named "intensive cleaning procedure covid 19 goggles.docx" to a personally owned Microsoft account on 5/24/2021 11:10 AM EST from Ridley's Ecolab workstation, an HP 1030 G2.

- 19. Forensic analysis revealed Ridley uploading a file named "notes for maytag 2006 contract.doc" to a personally owned Microsoft account on 5/24/2021 1:12 PM EST from Ridley's Ecolab workstation, an HP 1030 G2.
- 20. Forensic analysis revealed Ridley uploading a file named "esisting (*sic*) inventory quote.doc" to a personally owned Microsoft account on 5/24/2021 1:12 PM EST from Ridley's Ecolab workstation, an HP 1030 G2.
- 21. Forensic analysis revealed Ridley uploading a file named "2021 bar-s sanitation chemicals example rfp purchase agreement october 2020.docx" to a personally owned Microsoft account on 6/8/2021 10:55 AM EST from Ridley's Ecolab workstation, an HP 1030 G2.
- 22. Forensic analysis revealed Ridley uploading a file named "tyson monthly tracking report 06-2021.xlsx" to a personally owned Microsoft account on 6/18/2021 10:13 PM EST from Ridley's Ecolab workstation, an HP 1030 G2.
- 23. I understand that ChemTreat terminated Ridley in March 2022, purportedly after its investigation uncovered the fact that Ridley had emailed an Ecolab file from his personal Microsoft email account to his ChemTreat email account in September 2021. This is consistent with my analysis of the Digital Guardian Report, which uncovered evidence of Ridley uploading Ecolab files to his personal Microsoft account as documented in paragraphs 15 through 22 above.
- 24. It is my opinion that Ridley exfiltrated the many Ecolab files documented in this report specifically to utilize them while employed at ChemTreat.

Forensic Analysis - Downloading Files to an External LaCie USB Drive

25. Forensic analysis revealed Ridley downloading and copying a significant number of documents and Ecolab data to two separate external USB drives in the two months prior to Ridley's resignation from Ecolab. I have been informed that Ridley's last date of employment at Ecolab was July 1, 2021.

- 26. Forensic analysis revealed Ridley exporting a file named "ridley contacts.csv" from Ridley's Ecolab Microsoft Outlook account to an external USB drive, USB Association VendorID 090c, serial number 4160000000000000, on 6/21/2021 3:36:00 PM.
- 27. Forensic analysis revealed Ridley downloading and copying the 9,741 files and folders listed in **Exhibit** D to a removable LaCie brand USB drive ("LaCie Drive"), serial number def10dce9db4, on 6/1/2021.
- 28. Forensic analysis revealed Ridley downloading and copying the 149 files and folders listed in **Exhibit** E to the LaCie Drive on 5/27/2021.
- 29. Forensic analysis revealed Anthony Ridley downloading and copying the 185 files and folders listed in **Exhibit** F to the LaCie brand USB drive on 5/26/2021.
- 30. Forensic analysis revealed Anthony Ridley downloading and copying the 1,798 files and folders listed in **Exhibit** G to the LaCie brand USB drive on 5/25/2021.
- 31. Forensic analysis revealed Anthony Ridley downloading and copying the 4,891 files and folders listed in **Exhibit** H to the LaCie brand USB drive on 5/24/2021.

Forensic Analysis of Three USB Drives

32. I was provided with three USB drives belonging to Ecolab which Anthony Ridley kept after his employment with Ecolab ended. I further understand that Ridley returned these drives to Ecolab after Ecolab's counsel demanded that they be returned. In fact, these three drives were sent to me directly by Ridley's counsel. Upon receipt of the drives, I generated industry standard bit-for-bit forensic images of each drive. The makes, models and serial numbers of the three USB drives are listed below in Table 1 and are incorporated herein by reference.

Table 1 – Three USB Drives

EVIDENCE #	MAKE/MODEL	SERIAL NUMBER
USB001	UDisk	6&25676984&0&_&0

USB002	USB Flash Disk	0416080000012762 Revision: 1100
USB003	USB DISK 2.0	910101099030

- 33. Forensic analysis revealed that Anthony Ridley created a folder on drive USB001 named "Files from Ridley's personal computer" on 2/9/2022 3:34:01 PM, which I understand was after Mr. Ridley received a cease-and-desist letter from Ecolab's counsel earlier that same day.
- 34. Forensic analysis revealed a file named "_esktop.ini" on drive USB001 with a file creation date of 2/9/2022 3:34:01 PM. "_esktop.ini" is a Windows system file which normally is only found in the desktop folder of a Windows computer. Therefore, it is my expert opinion that Anthony Ridley copied this "_esktop.ini" file from a Windows computer's desktop folder to drive USB001 on 2/9/2022 3:34:01 PM.
- 35. Forensic analysis revealed multiple deleted files on drive USB001. A complete list of the deleted folders and files recovered from drive USB001 is listed below as Table 2 and is incorporated herein by reference. In my opinion, Mr. Ridley deleted the files listed below in Table 2 in a failed attempt to hide the fact that the drive contained Ecolab files.

Table 2 – Deleted Folders and Files Recovered from Drive USB001

Deleted Folder or File Name	Location on Drive USB001
_ESKTOP.INI	USB001:\Files from Ridley's personal computer\Music\
_ESKTOP.INI	USB001:\Files from Ridley's personal computer\Pictures\
Sales Plan Strategies.pdf	USB001:\Sales Planning Tools\Planning Guides\
Pilgrim's-JBS Boiler Operator Training	
Final 4kwk.ppt	USB001:\
Proposal for George Dickel RO Program	
121417EC (002) - December 2017.pdf	USB001:\
~\$Pilgrim's-JBS Boiler Operator Training	
Final 4kwk.ppt	USB001:\
Sales Tactics.pdf	USB001:\Sales Planning Tools\Planning Guides\
Pilgrim's-JBS Boiler Operator Training	
Final 4kwk.ppt	USB001:\
~\$Pilgrim's-JBS Boiler Operator Training	
Final 4kwk.ppt	USB001:\
Call Planner (Pads).docx	USB001:\Sales Planning Tools\Sales Plans\
Sales Plan Overview.docx	USB001:\Sales Planning Tools\Sales Plans\

Activity Log.docx	USB001:\Sales Planning Tools\Sales Plans\
Target Account Assessment.docx	USB001:\Sales Planning Tools\Sales Plans\
H2W	USB001:\
Sales Planning Tools	USB001-ANTHONY-RIDLEY.E01\Root\Sales Planning Tools\
	USB001-ANTHONY-RIDLEY.E01\Root\Sales Planning
Planning Guides	Tools\Planning Guides\
	USB001-ANTHONY-RIDLEY.E01\Root\Sales Planning
Sales Plans	Tools\Sales Plans\

- 36. Forensic analysis revealed Anthony Ridley's deletion of a file named "Pilgrim's-JBS Boiler Operator Training Final 4kwk.ppt" from drive USB001 on 02/09/2022.
- 37. Forensic analysis revealed Anthony Ridley's deletion of a file named "Sales Plan Strategies.pdf" from drive USB001 on 02/09/2022.
- 38. Forensic analysis revealed Anthony Ridley's deletion of a folder named "Planning Guides" from drive USB001 on 02/09/2022.
- 39. Forensic analysis revealed Anthony Ridley's deletion of a file named "Ridley Contacts.CSV" from drive USB002 on 02/09/2022. In fact, this "Ridley Contacts.CSV" appears to be the exact same file Ridley exfiltrated from Ecolab on 6/21/2021 3:36:00 PM as memorialized in the Digital Guardian Report.
- 40. Therefore, it is my expert opinion that Ridley attempted, but failed to hide the fact that he was in possession of the above-mentioned Ecolab files.

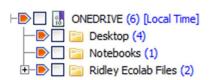
Forensic Analysis of the Anthony Ridley OneDrive Account

41. Forensic analysis of Ridley's Ecolab OneDrive account uncovered the fact that Ridley exfiltrated and then destroyed a significant number of Ecolab files in an attempt to deprive his former employer access to these same files.

- 42. I first made a forensic image of Anthony Ridley's Ecolab OneDrive account contents using AccessData's FTK Imager version 4.5.0.3 to enable forensic analysis of this evidence.
- 43. Forensic analysis of the Ridley OneDrive account forensic image revealed the fact that, after downloading and copying the folders and files described above in paragraphs 23 through 29, Anthony Ridley deleted all these same folders and files from his Ecolab OneDrive account.
- 44. Forensic analysis revealed the fact that Ridley's Ecolab OneDrive account originally held four top level folders, named "Desktop", "Notebooks", "Ridley's Ecolab Files" and "ridley's nalco folder" respectively.
- 45. The screenshot below from my forensic tool shows the current top level folder structure of Ridley's OneDrive account at the time I created a forensic image of the account. Forensic analysis revealed the fact that all the folders and files Ridley deleted from his Ecolab OneDrive account existed under a single the top-level folder named "ridley's nalco folder." This now deleted "ridley's nalco folder" folder would have existed in the screenshot below immediately under the "Ridley Ecolab Files" folder but for the fact that Ridley deleted the "ridley's nalco folder" folder from his Ecolab OneDrive account after downloading the "ridley's nalco folder" folder and the folder's contents to the LaCie drive.

Screenshot of Ridley OneDrive Account at time of Forensic Collection Showing Missing and

Deleted "ridley's nalco folder"



- 46. Forensic analysis revealed the fact that Ridley deleted the top level "ridley's nalco folder" after uploading the three files identified in paragraphs 15, 16 and 17 to Ridley's personal Microsoft cloud account.
- 47. Forensic analysis revealed the fact that prior to Ridley's deletion of the top level "ridley's nalco folder," Ridley's entire Ecolab OneDrive account contained 18 gigabytes of files.
- 48. I have been informed that Ridley asserts that he deleted the files in order to "declutter" his OneDrive account. It is my opinion that there was absolutely no need to "declutter" his OneDrive account, but in fact this act of deletion was designed to deprive Ecolab access to these same files.
- 49. I have been informed that ChemTreat wiped beyond recovery all content of Anthony Ridley's ChemTreat work computer. Forensic analysis of the Ridley ChemTreat work computer before it was wiped could have revealed evidence of Ridley downloading Ecolab files to his ChemTreat work computer from Ridley's personal Microsoft account and evidence of Ridley accessing and copying information from the exfiltrated Ecolab files stored within Ridley's personal Microsoft account to newly created ChemTreat files.
- 50. Therefore, in my opinion, and all evidence is consistent with the fact that Ridley exfiltrated thousands of Ecolab files and then deleted those same files to deprive Ecolab access to them.

ChemTreat's CrowdStrike Report - CHEMR-000002195.XML

51. I was provided with a document produced by ChemTreat labeled as CHEMR-000002195.xml, which represents a CrowdStrike report containing some actions performed by Anthony Ridley while employed at ChemTreat. I performed a forensic analysis of CHEMR-000002195.xml and discovered the following evidence.

Missing AmazonBasics USB Drive Serial Number 180129000600

52. Forensic analysis of the CrowdStrike report revealed the fact that Anthony Ridley disconnected an AmazonBasics external USB drive, serial number 180129000600, on 2021-07-09 T10:21:37.103+0000 ("UTC") from his ChemTreat laptop.

CHEMR-000002195.XML CrowdStrike Report Reveals an AmazonBasics USB Drive

```
</result>
<result offset='1500102'>
   <field k='_time'>
      <value><text>2021-07-09T10:21:37.103+0000</text></value>
   </field>
   <field k='name'>
      <value><text>DcUsbDeviceDisconnectedV2</text></value>
   </field>
   <field k='DeviceManufacturer'>
      <value><text>AmazonBasics</text></value>
   </field>
   <field k='DeviceProduct'>
      <value><text>AmazonBasics Hard Drive Enclos</text></value>
   </field>
   <field k='DeviceSerialNumber'>
      <value><text>180129000600</text></value>
   </field>
```

53. As of the date of this Expert Report, I have not been provided with a forensic image of this particular USB drive.

Ridley Accessed His Personal Microsoft Account Using His ChemTreat Laptop

54. Forensic analysis of CHEMR-000002195.xml identified the fact that Anthony Ridley accessed his personal Microsoft account by visiting "cdn.odc.officeapps.live.com" on 2021-10-30 T21:20:51.298+0000 (UTC). Live.com is Microsoft's website for individual, non-organizational customers of Microsoft online email and document storage services.

- 55. Forensic analysis revealed that less than one minute later, Ridley accessed a file named "EMS-103A Empty Container Requirements.docx" in his ChemTreat OneDrive folder named "Arnold Air Force Base\HVAC bid 2021\" at 2021-10-30 T21:21:14.030+0000 ("UTC").
- 56. It is my opinion that this is evidence of Ridley accessing the exfiltrated Ecolab files from his personal Microsoft OneDrive account in order to use the content of the exfiltrated files.
- 57. Arnold Air Force Base was one of the customers whose files were uploaded by Ridley to his personal Microsoft account from Ridley's former Ecolab work computer on May 24, 2021.
- 58. In my opinion, the CrowdStrike tool, unlike the Digital Guardian tool, is not a data loss prevention tool. In fact, I spoke with three CrowdStrike representatives on February 7, 2023 who confirmed the fact that CrowdStrike does not hold itself out to be a data loss prevention tool developer. The CrowdStrike representatives stated that developing and offering a data loss prevention tool is planned for the future.
- 59. For example, the Digital Guardian tool recorded many types of human file interaction commonly used by employees to exfiltrate data as seen in the screenshot below. In contrast, the CrowdStrike tool does not record "attaching mail", "Network Transfer Download", "Network Transfer Upload", "Print", or "Send Mail".

Digital Guardian Human Activity Recorded

(Select All)
✓ Attach Mail
File Copy
✓ File Move
✓ File Save As
✓ Network Transfer Download
✓ Network Transfer Upload
Print
✓ Send Mail

60. Forensic analysis of the now wiped ChemTreat laptop would have provided the detail as to which specific exfiltrated Ecolab files Ridley was accessing from his personal Microsoft OneDrive account while interacting with the related ChemTreat files. Therefore, searches for the exfiltrated Ecolab file names within ChemTreat's email and OneDrive system alone will not uncover the Ecolab information Ridley used to while employed at ChemTreat.

Dated: February 24, 2022

Respectfully submitted,

Laurence D. Lide

Laurence D. Lieb



MCFE - AXIOM CERTIFICATION IS AWARDED TO:

Laurence Lieb

In recognition of expert use of Magnet Forensics' Magnet AXIOM digital forensics software and understanding of the core concepts of digital examinations.

10/20/2022 13:38:06 +00:00

2 years from the Date of Issue

AUTHORIZED BY CHARLES COBB, VP of TRAINING

DATE OF ISSUE

DATE OF EXPIRY



Laurence Lieb

Has fulfilled the requirements set forth by BlackBag Technologies, and is therefore officially recognized as a

Certified BlackLight Examiner

This certification is being awarded to Laurence Lieb on 05/07/2020 for the successful completion of the 16 hour Digital Forensic Basics course and written certification exam. This CBE certification shall remain current and effective for 3 years from this date.

1 Ourore

Ken Basore CEO | BlackBag Technologies



Matt McFadden Director | Training

EXHIBIT C

Laurence D. Lieb

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TECHNICAL EXPERTISE

Systems: Windows, Windows Servers, Microsoft Exchange, Lotus Notes, Linux, OS X, iOS, Android, Windows Phone, Blackberry

Software: Magnet Forensics Axiom, Digital Inspector, Cellebrite UFED 4PC, Cellebrite Physical Analyzer, Forensic Explorer, Passmark OSForensics, FTK Imager, MOBILedit Forensic, Elcomsoft Phone Breaker Forensic, Aid4Mail Forensic

TESTIMONY

I have been offered as an expert witness and testified at hearing, or by affidavit or declaration in the following cases:

- Testimony provided December 29, 2022 in a matter captioned BGC Partners, Inc. et al v. Avison Young (Canada), Inc. et al, CIVIL DOCKET FOR CASE #: 2:15-cv-00531-RFB-EJ, Judge Richard F. Boulware, II. Hired by Tina Solis of Nixon Peabody.
- Testimony provided January 10, 2022 in a matter captioned People of the State of Michigan v.
 Stephen Mark Ricketts, Circuit Court # 19-02774-FH, District Court # D1900653, Case # 41-19-002109-99, Judge Christina Elmore. Hired by Andrew John Rodenhouse of Rodenhouse Law Group.
- Testimony provided August 17th, 2021 at a University of Maryland, Division of Student Affairs, The
 Office of Student Conduct hearing, Case Number 2020329902. Hired by Defendant counsel David
 Eagle of Klehr Harrison Harvey Branzburg LLP

- v. Avison Young (Canada) Inc. Et al Case No 2015-L-2186. Circuit Court of Cook County Illinois County Department Law Division. Hired by Plaintiff counsel Nixon Peabody LLP.
- Sworn testimony provided March 22nd 2019, in a matter captioned Newmark Group Inc. Et al, v.
 Avison Young (Canada) Inc. Et al Case No 2015-CA-1028B. Superior Court of the District of Columbia, Civil Division. Hired by Plaintiff counsel Nixon Peabody LLP.
- Sworn testimony provided February 28th, 2019 through March 1st, 2019 at Trial in a matter captioned LovePop, Inc. v. PaperPop Cards, Inc. Civil Action No. 1:17-cv-11017. Hired by Defendant PaperPop counsel Jaye Quadrozzi of Young & Associates.
- Sworn testimony provided November 29, 2018 in a matter captioned LovePop, Inc. v. PaperPop
 Cards, Inc. Civil Action No. 1:17-cv-11017. Hired by Defendant PaperPop counsel Jaye Quadrozzi
 of Young & Associates.
- Sworn testimony provided May 31, 2018 in a matter captioned In RE the Marriage of Jose Betanzos,
 Petitioner, And Manuela Correa, Respondent, No. 18 OP 70489 consol. w/18 D 2149 Cal. C.
 Circuit Court of Cook County, Illinois, County Department Domestic Relations Division. Hired by
 Caitlin Cervenka, LAF.
- Sworn testimony provided April 17, 2018 in a matter captioned Marcus J Moore v. Annette Ambriz.
 Case No. 2018OP000542. State of Illinois, Lake County, Nineteenth Judicial Circuit, Domestic
 Violence Courthouse. Hired by Respondent's counsel Jennifer Payne of the Legal Assistance
 Foundation of Chicago. Designated as an expert by the Honorable Judge Diane E. Winter.
- Sworn testimony provided October 27, 2017 in a matter captioned Juana Luna v. Jose Rodrigo
 Cabrera. Case No. 17 OP 75249. State of Illinois, Circuit Court of Cook County, Domestic
 Violence Courthouse. Hired by Claimant's counsel Caitlin Cervenka of the Legal Assistance
 Foundation of Chicago. Designated as an expert by the Honorable Judge Judith C. Rice.
- Sworn testimony provided April 15th, 2016 in a matter captioned, Stacey Verhil v. Frank Marchese.
 Case No. 14-03159-DM. Kent County Courthouse, Grand Rapids Michigan. Hired by Plaintiff's counsel Tara Velting of Garan Lucow Miller P.C. Designated as an expert by the Honorable Judge

- Sworn testimony provided August 7th, 2015 in a matter captioned, Stacey Verhil v. Frank Marchese.
 Case No. 14-03159-DM. Kent County Courthouse, Grand Rapids Michigan. Hired by Plaintiff's counsel Tara Velting of Garan Lucow Miller P.C. Designated as an expert by the Honorable Judge Kathleen A. Feeney.
- Sworn testimony provided November 13th, 2014 in a matter captioned, Goken America, LLC,
 Plaintiff v. Naveen Kumar Bandepalya, Cresttek, LLC, & American Hydrostatics Distribution, Inc.
 Defendants. 12:14CV1445 U.S. District Court, S.D. of Ohio, Eastern District. Hired by
 Defendants' counsel Frederick D. Elias of Ellias & Elias, P.C.
- Sworn testimony provided July 11, 2013 in a matter captioned, Samson Lift Technologies, LLC versus JERR-DANN Corporation, a/k/a JERRDANN Corporation and Oshkosh Corporation, Index Number 653586/2011, New York County Supreme Court. Hired by Defendant's Counsel Daniel T. Flaherty, Esq., Godfrey & Kahn

EXPERT WORK

- GHSP, Inc. V Arthur Hazen Sills, United States District Court for the Western District of Michigan, Southern District. Case No. 1:21-cv-218. Hired by Amanda Narvaes of Drew Cooper & Anding.
- CCC Information Services Inc. v First Rate Excavate Inc., United States District Court, District of South Dakota Souther Division. Case CIV 21-4068. Hired by Timothy Hardwicke of GoodSmith Gregg and Unruh.
- Mesirow Financial Holdings Inc. v Hart 353 North Clark LLC. Circuit Court of Cook County,
 Illinois, County Department, Chancery Division. Case No. 2021CH01591. Hired by John Grady of Grady Bell LLP
- LM Construction Co., LLC v 5th & Deer Springs LLC District Court Clark County Nevada, Case
 No. A-19-797928-C. Hired by Mark Bourassa, The Bourassa Law Group.
- Detroit Welded Tube LLC v Consolidated Metals Inc. United States District Court Eastern District of Michigan. Hired by David Hansma, Seyburn Kahn.
- Hino Motors Manufacturing U.S.A. Inc, v. Chris Hetman et al. United States District Court for the Case 1:22-cv-00050-TRM-SKL Document 298-1 Filed 06/21/23 Page 20 of 29 PageID #: Eastern District of Michigan. Case No.: 2:299390031. Hired by J. Michael Honeycutt, Fisher &

Phillips.

- John Doe v. Ava Whitney Blige et al. District Court Clark County Nevada. Case No: A-21-828077-B
 Department 11. Hired by Louis Palazzo, Esq., Palazzo Law Firm.
- SecureNet Technologies LLC v. Andrew Wilson and John Does 1-25, The Fourth Judicial District Court Utah County No. 200300026. Hired by Michael K. Green, Cowdell & Woodley P.C.
- Trustees of International Union of Painters and Allied Trades District Council 711 Health & Welfare
 Fund et al v. FCS Group, LLC. New Jersey Court Case Number: 1:21-cv-10120. Hired by Steven J.
 Bushinsky, Esquire O'Brien Belland & Bushinsky LLC.
- Maya Pettaway v John Cleland and Wyoming City Pizzeria Inc.. State of Michigan in the 17th Circuit
 Court. Case No. 19-06505-CZ. Hired by Andrew Rodenhouse, Esq., Rodenhouse Law Group P.C.
- Peak6 NFS Holdings LLC, National Flood Services Holdings LLC, and National Flood Services LLC
 v AON U.S. Holdings, Inc. and AON Corporation. In the Court of Chancery of the State of
 Delaware. C.A. No. 2020-0849-AGB. Hired by Timothy Hardwicke, Goodsmith, Gregg and Unruh.
- CBRE, Inc. v Kathryn Tiernan. JAMS Arbitration Case No. 1340018099. Hired by Timothy Hardwicke, Goodsmith, Gregg and Unruh.
- Alphacard Systems LLC et al v Fery LLC. Case # 3:19-cv-20110. New Jersey District Court. Hired by Timothy Hardwicke, Goodsmith, Gregg and Unruh.
- Kathleen Quinn v Auto Injury Solutions Inc. Case No. 20-cv-1966. United States District Court
 Northern District of Illinois. Hired by Timothy Hardwicke, Goodsmith, Gregg and Unruh.
- George Spencer et al v Kuldeep Malik et al. C.A. No. 2020-0609-JTL In the Court of Chancery of the State of Delaware. Hired by David Eagle, Klehr Harrison Harvey Branzburg LLP
- BMO Harris Bank, NA v Jerry Lumpkins. United States District Court for the Northern District of Illinois Eastern Division Case: 1:20-cv-05642 Hired by Jason Hirsch, Esq. Levenfeld Pearlstein.
- Axion RMS LTD. V UCP Seguin of Greater Chicago Foundation et al. Circuit Court of Cook
 County Illinois. Case No 2019 L 001168. Hired by Jason Hirsch, Esq. Levenfeld Pearlstein.
- Capricorn Management Systems Inc. v. Government Employees Insurance Company and Auto

- Division. Case N. 2:15-cv-02926-DRH-SIL. Hired by Timothy Hardwicke, Goodsmith, Gregg and Unruh.
- Frederick Kaegi, Claimant, and Columbia Wanger Asset Management, LLC & Ameriprise Financial,
 Inc., Respondents. AAA Case No. 01-18-0000-0820. Hired by Michael Shakman, Miller Shakman,
 Miller Shakman and Beem.
- Shaun Dilday v. James Bennett III. Maricopa County Superior Court Cause No. CV2017-014621.
 Hired by Karen Karr, K. Leone Karr Law Office.
- LovePop, Inc. v. PaperPop Cards, Inc. United States District Court, District of Massachusetts. Civil Action No. 1:17-cv-11017. Hired by Jaye Quadrozzi, Young and Associates P.C.
- Courtney Taul-Reed v. Lexington Women's Health, PLLC. Commonwealth of Kentucky Fayette
 Circuit Court 9th Division. Civil Action No. 14-CI-02792. Hired by James Smith, Gazak Brown.
- Regina Andrew Design, Inc. v. Eric Magun. United States District Court for the Easter District of Michigan, Southern Division, Case No. 18-CV-10091-LJM-DRG. Hon. Laurie J. Michelson. Hired by Fatima Bolyea, Mantese Honigman.
- People of the State of Michigan v. Todd Courser. Lapeer County Circuit Court, State of Michigan.
 Case No. 17-013022-FH. Hon. Nick O. Holowka. Hired by Sarah Howard, Pinsky Smith, Fayette & Kennedy, LLP.
- Peter M. Peer, II, D.O. v. West Shore Medical Center. United States District Court, Western District
 of Michigan Southern Division, Case No. 1:17-cv-72. Hon. Paul L. Maloney. Hired by John
 Lichtenberg, Rhoads McKee.
- Schmalz, Inc. v. Better Vacuum Cups, Inc. United States District Court, Eastern District of Michigan, Southern Division Case No. 16-10040. Judge Gershwin A. Drain. Hired by Dean Amburn, Dean Amburn Law, PLLC
- Cover Crop Shop, LLC v. Isaac Weber. Court of Mercer County, Ohio Civil Division, Case No. 16
 CIV 069. Judge Jeffrey R. Ingraham. Hired by Victor A. Veprauskas, Lambert Leser.
- David Grubb and Kristina Grubb, Claimants/Counter-Respondents v. Forest Ridge Construction,

- Lowell Construction Management, LLC and 4625 SECOND, LLC, v. David Cieszkowski. Case No.:
 16-002129-CB. Hon. Brian R. Sullivan. Hired by Kaveh Kashef, Clark Hill PLC.
- Stephen E. Slaga v. Total Health Care, Inc. and Universal Health Management Co. State of Michigan,
 Wayne County Circuit Court Civil Action No. 16-009942-CL Hired by Michael L. Pitt (P24429), Pitt
 McGehee Palmer & Rivers, PC.
- James W. Flinchbaugh v. Lean Learning Center Inc. and William Artzberger, Angelo J. Carlino and James Flinchbaugh Counter Defendants. State of Michigan, Circuit Court County of Oakland Michigan. Case No. 2016-151196-CB. Judge James M. Alexander. Hired by Brian H. Rolfe (P52680) Kemp Klein Law Firm.
- Melisa Mays et. al. Class Action v. Governer Rick Snyder, City of Flint et. al., United States District
 Court, East District of Michigan 2:15-cv-14002-JCO-MKM. Hired by Michael L. Pitt (P24429),Pitt
 McGehee Palmer & Rivers, PC.
- PCM, Inc. v. B2B Computer Products, LLC d/b/a ITsavvy. Hired by Katie M. Connolly, Nilan Johnson Lewis
- Constance Bryant v. Moh¬ammad Benammar et. al., Court No. 15 L 394, Claim N.
 63CBLG14003111. Hired by Anam Rodrguez, Shams, Rodgriguez & Mozwecz, P.C.
- The Primadonna Company, LLC v. The Westmark Group, Inc. District Court Clark County Nevada
 Case No. A-15-722892-B Dept. XIII. Hired by Jeremy R. Kilber (10643), Weil Drage
- Robert L. Drummond v. Hartford Fire Insurance Company. U.S. District Court District of Connecticut. Civil N. 3:14-cv-0183-AWT. Hired by Jason T. Brown, JTB Law Group, LLC
- Sylvia Magdeleno v Rico Enterprises, Inc. U.S. District Court District of Arizona Case No. 2:15-cv-00364-SRB. Hired by Karen L. Karr (014501) Clark Hill PLC
- Senderra Rx Partners, LLC v. Denay R. Loftin and Elizabeth Naylor. U.S. District Court Eastern
 District of Michigan Southern Division. Case No. 2:15-cv-13761-AC-RSW. Magistrate R. Steven
 Whalen. Hired by Paul A. Wilhelm Clark Hill PLC.
- Vulpina, LLC v Randy K. Dzierzawski and Kimberly Dzierzawski. U.S. Bankruptcy Court Eastern

- Turco, Brooks, Wilkins, Sharkey & Turco PLLC
- Laura Sacha-Staskiewicz v. Metropolitan Health Corporation and Micahel Faas. State of Michigan
 Circuit Court for the County of Kent. Case No. 15-02809-CKB. Hon. Christopher P. Yates. Hired
 by Jason Thompson, Sommers Schwartz P.C.
- Jeanne L. Fox v The Michigan Department of Technology Management and Budget, et. al. State of Michigan. Case No.: 14-857-CD Circuit Court County of Ingham. Hired by Aaron L. Davis (P77406) Fraser Trebilcock Davis & Dunlap, P.C.
- Sierra Development Co. d/b/a Club Cal Neva. v. Chartwell Advisory Group, Ltd. U.S. District Court District of Nevada. Case No. 3:13-cv-00602-RFB-VPC. Hired by Scott L. Hernandez Robison, Belaustegui, Sharp & Low.
- IPOX Schuster, LLC v. Nikko Asset Management Co. Ltd. And Lazard Asset Management LLC.
 U.S. District Court Northern District of Illinois Eastern Division Civil Action No. 15C9955. Hired
 by Aaron Charfoos of Dykema Gosset PPLC
- Weatherford International, LLC v. Michael McKeachnie et al. U.S. District Court District of Colorado Case No. 1:15-cv-01320-MSK-KLM. Hired by Christopher D. Kratovil Dykema Gossett PLLC
- In re Country Stone Holdings, Inc. Debtor. U.S. Bankruptcy Court Case No. 14-81854. Hired by Dante Stella Dykema Gossett PLLC.
- Mike Kidd v. Krave Group, LLC et al. U.S. District Court Northern District of Texas Fort Worth Division Case 4:15-cv-00679-Y. Hired by James C. Gordon Gordon & Sykes, LLP
- In the Matter of Trinity Capital Corporation (D-3320), Securities and Exchange Commission,
 Denver Regional Office. Hired by Edward F. Malone, Esq. of Barack Ferrazzano Kirschbaum & Nagelberg LLP. Case No.: 14-857-C Hon. James S. Jamo
- Rachel Edelshteyn v. Stephen Calabrese, 15OP70020. Hired by Liz Ptacek Supervising Attorney –
 Advocacy, Domestic Violence Legal Clinic, State of Illinois, Circuit Court of Cook County,
 Domestic Violence Courthouse.

- Advocacy, Domestic Violence Legal Clinic, State of Illinois, Circuit Court of Cook County, Domestic Violence Courthouse.
- Tina Atkinson, Grace Bonnie, Jessica Frazier, Florence Gianforte, Richard Hall, Rachel Marshall, Shelly Primus, and Karen Stout vs. Teletech Holdings, Inc., Teletech@home,Inc., and Kenneth Tuchman, United States District Court, Southern District of Ohio, Civ. No. 3:14-cv-00253-WHR. Hired by Matthew L. Turner, Esq., Sommers Schwartz, P.C.
- Jasmine Lawrence, Individually and on Behalf of All Similarly Situated Individuals, v. Maxim
 Healthcare Services, Inc., 1:12-CV-02600-cab, United States District Court, Northern District of
 Ohio, Cleveland Division. Hired by Jason S. Thompson, Esq., Sommes Schwartz, P.C.
- Tara A. Felty, v. Waupaca Foundry Inc. and Waupaca Foundry Inc. v. Stewart Industrial, Perry
 Circuit Court, State of Indiana, 62C011407-CT-344. Hired by Paul Benson, Esq., Michael Best &
 Friedrich.
- Tri-State Generation et al v. Mitsubishi International Corporation et al, United States District Court,
 District of Arizona, 3:14-cv-08115-NVW. Hired by Benjamin Subin, Esq. Holland & Knight.
- John Doe 1; John Doe 2; John Doe 3; John Doe 5; John Doe 6; John Doe 7 And Next Friend Of Minor John Doe 4, On Behalf Of Themselves And A Class Of All Others Similarly Situated, Vs. Michigan Department Of Corrections ("Mdoc"); Rick Snyder, Governor Of The State Of Michigan; Daniel H. Heyns, Director, Michigan Department Of Corrections; Thomas Finco, Deputy Director Of Mdoc Correctional Facilities Administration; Dennis Straub, Former Deputy Director Of Mdoc Correctional Facilities Administration; Randy Treacher, Chief Deputy Director Of Mdoc Correctional Facilities Administration; Willie Smith, Warden Of Carson City Correctional Facility; Heidi Washington, Warden Of Charles Egeler Reception And Guidance Center; Mary Berghuis, Warden Of Earnest C. Brooks Correctional Facility; Paul Klee, Warden Of Gus Harrison Correctional Facility; John Prelesnik, Warden Of Richard A. Handlon Correctional Facility; Cathleen Stoddard, Warden Of Richard A. Handlon Correctional Facility; Cindi S. Curtin, Warden Of Oaks Correctional Facility; David Bergh, Warden Of Thumb Correctional Facility; Jeffrey Woods, Warden Of Chippewa Correctional Facility; Robert Napel, Warden Of Marquette Branch Prison; And

- Michigan, Circuit Court For The County Of Washtenaw. Hired By Deborah Labelle, Esq.
- Carol A. Sedges v. St. Cloud Health Care Center, Inc. et al, Superior Court of New Jersey Law
 Division, Essex County, ESX-L-7298-12. Hired by John D. Coyle, Esq., LeClair Ryan.
- United States of America v. Farid Fata, 2:13-mj-30484, United States District Court, Eastern District of Michigan. Hired by William H. Horton, Esq., Giarmarco, Mullins & Horton, P.C.
- UPS Mail Innovations v. James Cuthbert. 2013CH001847. Circuit Court for the Eighteenth Judicial Circuit, DuPage County, Illinois. Hired by Quarles and Brady.
- Huntington National Bank V. Timothy Weaver, Reneé Jerisk, Anthony Ciccarelli, Individuals, And Northpointe Bancshares, Inc. State Of Michigan Kent County Circuit Court. Hired By John M. Lichtenberg, Esq.Rhoades Mckee P.C.
- Creative Foam Corporation v. Kurt Schloemp. 2014-140875-CK. State of Michigan, Circuit Court for the County of Oakland. Hired by Willam H. Horton, Esq. Giamarco & Mullins.
- Nexteer Automotive v. Mando America Corporation. 13-021401-CK-1. State of Michigan, Circuit Court for the County of Saginaw. Hired by Willam H. Horton, Esq. Giamarco & Mullins.
- Wilshire Vermont Housing Partners LP v. Taisei Construction Corporation et al. BC504178.
 Superior Court of the State of California, The County of Los Angeles. Hired by Thomas McNutt,
 Esq., Youngerman and McNutt.
- Information Technology Customer Care, Inc. v. Stores Online, Inc. 090401169. Fourth Judicial
 District Court, Utah County, State of Utah. Hired by Blair R. Jackson, Esq. Invictus Law Firm.
- North American Mechanical, Inc. v. Walsh Construction Company II, LLC. United States District Court, Eastern District of Wisconsin, Milwaukee Division. Hired by Joshua Levy, Esq., Crivello Carlson.
- Asyst Tech LLC v. Eagle Eyes Traffic Inc. Co. Ltd. 2:11-cv-00381. United States District Court, for the Eastern District of Wisconsin. Hired by Daniel T. Flaherty, Godfrey and Kahn.
- Sharon Almonrode v. Sullivan Ward Asher Patton P.C. et al. 11-122425-CZ. State of Michigan,
 Circuit Court for the County of Oakland. Hired by Sullivan Ward Asher Patton P.C.

- Hired by Jeffery B. Kaiser, Esq. Kaiser P.C.
- MPT of Hoboken TRS, LLC v. HUMC Holdco, LLC. Court of Chancery of the State of Delaware.
 Hired by Wallace Showman of Ajamie.
- Greg Sabanski v. Crystal Mountain Resort. 14-9904-NO. State of Michigan, Circuit Court for the County of Benzie. Hired by Scott D. Feringa, Esq. of Sullivan Ward Asher & Patton P.C.
- Kleen Products LLC et al v. Packaging Corporation of America et al. 1:10-CV-05711. United States
 District Court, Northern District of Illinois. Hired by Mayer Brown.
- Harold Talley and Jennifer Talley v. General Organics HC Inc. 13L007998. Circuit Court of Cook
 County Illinois, County Department, Law Division. Hired by Markel Service Incorporated.
- Maribel Torres v. Electro-Motive Diesel, Inc. Circuit Court of Cook County, Illinois, County
 Department, Law Division. Hired by Legal Assistance Foundation of Chicago.
- ESTATE OF KATHRYN E. QUINLAN, by Timothy J. Schneider, its Personal Representative;
- Plaintiff; Vs.Mark E. Prince, M.D.; And Avraham Eisbruch, M.D.In Consolidation With: Estate Of Kathryn E. Quinlan, By Timothy J. Schneider, Its Personal Representative Vs.The Regents Of The University Of Michigan, D/B/A University Of Michigan Health System And University Of Michigan Medical Center; Case No. 11-0006-Mh. 11-24-Nh. State Of Michigan, Circuit Court For The County Of Washtenaw. Hired By Dale L. Hebert, Esq. Smith Haughey Rice & Roegge, P.C.
- Miranda Jo Truitt et al, v. The Chicago School of Professional Psychology. BC495518. Superior
 Court of the State of California for The County of Los Angeles. Hired by Dean Dickie, Esq. Miller
 Canfield.
- Jocelyn Lewis et al v. Lebanon Public Library. 1:13-cv-0445RLY-DKL. United States District Court, Southern District of Indiana, Indianapolis Division. Hired by Kighlinger and Grey

EMPLOYMENT HISTORY

August 2014 to Present – CEO and President, Tyger Forensics, Inc.

January 2011 – May, 2016 – Chief Innovation Officer, Scarab Consulting

November 2007 – January 2011 – National Director, Esquire Litigation Solutions

April 2003 – April 2006 – Owner, President, Elijah Technologies

DIGITAL FORENSIC CERTFICATIONS

- I became a Magnet Forensics Certified Examiner (MCFE) on October 20th, 2022, following coursework, research and testing.
- I became a Cellebrite Certified Physical Analyst (CCPA) on December 10th, 2021, following coursework, research and testing.
- I became a Cellebrite Certified Operator (CCO) on December 7th, 2021, following coursework, research and testing.
- I became a Certified BlackLight Expert (CBE) on May 6th, 2020, following coursework, research and testing.
- I became a Cellebrite Advanced Smartphone Analysis (CASA) Examiner on October 26, 2017, following coursework,
 research and testing.
- I became a Cellebrite Certified Physical Analyst (CCPA) on December 25, 2015, following coursework, research and testing.
- I became a Certified OSForensics Examiner (COSFE) as of November 25, 2015, following coursework, research and testing.
- I have been a Certified Blacklight Examiner (CBE) since October 20, 2015, following coursework, research and testing.
- I received Lantern Certified Examiner (LCE) status on June 12, 2014, following testing and studies.
- I have been a certified Forensic Explorer Examiner (FEXE) since completing the tests on September 12, 2014.

EDUCATION

B.A. in Japanese Studies, University of Illinois at Urbana-Champagne, Champagne, IL

PROFESSIONAL MEMBERSHIPS

I am a ranking Senior Member of ForensicFocus.com, a digital forensics and electronic discovery portal.

I am also a licensed private investigator in Michigan. My Michigan P.I. License number is #3701206704

PROFESSIONAL AWARDS

I was recognized in Legal Aid Chicago's 2021 Annual Report for fifteen years of Pro Bono service.

I was recognized as a "Champion of Justice 2016" by the Domestic Violence Legal Clinic.

PROFESSIONAL PUBLICATIONS

I published a Continuing Legal Education class on employee turnover and forensic analysis best practices, currently accredited by bar associations in seventeen U.S. states

I published a Continuing Legal Education class on theft of trade secrets best practices, currently accredited by bar associations in seventeen U.S. states

I published a Continuing Legal Education class on smart-phone forensic best practices, currently accredited by bar associations in seventeen U.S. states.

I published an article containing original computer forensic research findings on Microsoft Windows 8 on www.ForensicFocus.com.

I published an article titled "Navigating the Sea of Change in eDiscovery Technology" at InsideCounsel.com, White Papers Section. August 2010.

I published an article titled "When Dealing with Electronic Discovery, Don't Be Afraid; Just Don't Go Alone" in Thomson Reuters EDRM Quarterly Magazine. Spring 2009.